Author index

AARS, H. (*see* THORVALDSON, J.)
AGNATI, L. F. (*see* VON EULER, G.)
AGNATI, L. F. (*see* FUXE, K.)
AGNATI, L. F. (*see* HARFSTRAND, A.)
AGNATI, L. F. (*see* JANSSON, A.)
AGNATI, L. F. (*see* ZOLI, M.)
AHONEN, E. (*see* HARTIKAINEN, J.)
AHRÉN, B. (*see* KARLSSON, S.)
AHRÉN, B. Effects of calcitonin, katacalcin, and calcitonin gene-related peptide on basal and TSH-stimulated thyroid hormone secretion in the mouse, 133
ALAMEDDINE, H. (*see* ULLMAN, M.), 537
ALINO, S. F. & UVNÄS-MOBERG, K. Differential effect of bombesin on intraluminal and intravascular release of gastric gastrin and somatostatin in anaesthetized rats, 565
ALVING, K. (*see* MATRAN, R.), 29, 335
ANDERSSON, K. Involvement of D1 dopamine receptors in the control of TSH secretion in the male rat, 449
ANDERSSON, R. G. G. (*see* JOHANSSON, I. G. M.)
ANDERSSON, S. E. & BILL, A. Effects of intravenous calcitonin gene-related peptide (CGRP) and substance P on the blood–aqueous barrier in the rabbit, 349
ÄNGGÅRD, A. (*see* LACROIX, J. S.)
ÅRHEM, P. (*see* JOHANSSON, S.)
ARONSSON, M. (*see* HARFSTRAND, A.)
ÁSGRIMSSON, H. (*see* JÓHANNSSON, M.)
ASTRAND, P.-Ö. (*see* NIE, Z. T.), 523

BAO, J. X., ERIKSSON, I. E. & STJÄRNE, L. On pre- and/or post-junctional roles of ATP and an unknown 'substance X' as sympathetic co-transmitters in rat tail artery, 65
BECH, C. (*see* MARTINI, S.)
BENFENATI, F. (*see* VON EULER, G.)
BILL, A. (*see* ANDERSSON, S. E.)
BJELKE, B. (*see* FUXE, K.)
BJELKE, B. (*see* ZOLI, M.)
BJÖRNBERG, J., MASPERS, M. & MELLANDER, S. Metabolic control of large-bore arterial resistance vessels, arterioles, and veins in cat skeletal muscle during exercise, 83
BROBERG, S. (*see* REN, J. M.)
BRUBAKK, A. O. (*see* MARTINI, S.)
BUSTAMANTE, S. A., FORSHULT, M. & LUNDGREN, O. Evidence for an intramural nervous control of epithelial cell migration in the small intestine of the rat, 469
BYLUND-FELLENIUS, A.-C. (*see* SOUSSI, B.)

CARLSON, S., TANILA, H., LINNANKOSKI, I., PERTOVAARA, A. & KEHR, A. Comparison of tactile discrimination ability of visually deprived and normal monkeys, 405
CARLSTEDT, A., NORDGREN, S., FASTH, S. & HULTEN, L. The influence of the pelvic nerves on anorectal motility in the cat, 57
CARTER, N., WISTRAND, P. J. & LÖNNERHOLM, G. Carbonic anhydrase localization to perivenous hepatocytes, 163
CINTRA, A. (*see* HARFSTRAND, A.)
CLEMONS, G. K. (*see* SANENGEN, T.)
CRIADO GUTIERREZ, J. (*see* YAJEYA, J.)

DALBORN, K. (*see* OLSSON, K.)
DAHLÉN, S.-E. (*see* RAUD, J.)
DAHLQVIST, Å., PEQUIGNOT, J. M. & HELLSTRÖM, S. Sympathectomy provides evidence of dopamine storage in rat laryngeal nerve paraganglia, 189

EDBLADH, M. & EDSTRÖM, A. Environmental factors contribute to the enhanced regeneration of frog sciatic sensory axons by a conditioning lesion, 169
EDLUND, A., SOLLEVI, A. & WENNMALM, Å. The role of adenosine and prostacyclin in coronary flow regulation in healthy man, 39
EDSTRÖM, A. (*see* EDBLADH, M.)
EIDE, P. K. & ROSLAND, J. H. The role of tail skin temperature in the facilitation of the tail-flick reflex after spinal transection or interference with descending serotonergic neurotransmission, 427
EKBLOM, B. (*see* FRIDÉN, J.)
EKSTRÖM, J., MANSSON, B., NILSSON, B.-O., ROSENGREN, E. & TOBIN, G. Spermidine/spermine-N′-acetyltransferase activity in isoprenaline-stimulated salivary glands, 249
EKSTRÖM, J., MÅNSSON, B., NILSSON, B.-O., ROSENGREN, E. & TOBIN, G. Receptors involved in the nervous system regulation of polyamine metabolism in rat salivary glands, 255
ELLINGSEN, I. (*see* NICOLAYSEN, G.)
ELLINGSEN, Ø. (*see* VENGEN, Ø. A.)
ELLINGSEN, Ø., SEJERSTED, O. M., VENGEN, Ø. A. & ILEBEKK, A. *In-vivo* quantification of myocardial Na–K pump rate during β-adrenergic stimulation of intact pig hearts, 493
ELY, D. (*see* VOLKMANN, R.)
ENEROTH, P. (*see* JANSSON, A.)
ENGBERG, G. (*see* SVENSSON, T. H.)
ERIKSSON, I. E. (*see* BAO, J. X.)
VON EULER, G., FUXE, K., BENFENATI, F., HANSSON, T., AGNATI, L. F. & GUSTAFSSON, J.-Å. Neurotensin

modulates the binding characteristics of dopamine D_2 receptors in rat striatal membranes also following treatment with toluene, 443

Fändriks, L. & Jonson, C. Influences of the sympatho-adrenal system on gastric motility and acid secretion and on gastroduodenal bicarbonate secretion in the cat, 285
Fasth, S. (*see* Carlstedt, A.)
Fernandez de Molina, A. (*see* Yajeya, J.)
Folkow, B. (*see* Volkmann, R.)
Forshult, M. (*see* Bustamante, S. A.)
Franco-Cereceda, A., Saria, A. & Lundberg, J. M. Differential release of calcitonin gene-related peptide and neuropeptide Y from the isolated heart by capsaicin, ischaemia, nicotine, bradykinin and ouabain, 173
Fredholm, B. B. (*see* Larsson, O.)
Friberg, P. (*see* Volkmann, R.)
Friberg, P., Rupp, H. & Nordlander, M. Functional and biochemical analyses of isolated rat hearts in renal and reversed renal hypertension, 123
Fridén, J., Seger, J. & Ekblom, B. Topographical localization of muscle glycogen: an ultrahistochemical study in the human vastus lateralis, 381
Fuxe, K. (*see* von Euler, G.)
Fuxe, K. (*see* Harfstrand, A.)
Fuxe, K. (*see* Jansson, A.)
Fuxe, K. (*see* Zoli, M.)
Fuxe, K., Agnati, L. F., Zoli, M., Bjelke, B. & Zini, I. Commentary: some aspects of the communicational and computational organization of the brain, 203

Godtfredsen, J. (*see* Vollmer-Larsen, A.)
Goertz, G. (*see* Nie, Z. T.), 513
Greenfield, S. A. (*see* Nedergaard, S.)
Grenhoff, J. (*see* Svensson, T. H.)
Grundström, N. (*see* Johansson, I. G. M.)
Gustafsson, J.-Å. (*see* von Euler, G.)
Gustafsson, J.-Å. (*see* Harfstrand, A.)
Gylfe, E. Phorbol ester desensitization of clonal insulin-releasing cell response to carbachol involves depletion of an intracellular calcium pool, 107

Hagbarth, K.-E. (*see* Nordin, M.), 149
Hakumäki, M. (*see* Hartikainen, J.)
Halvorsen, S. (*see* Sanengen, T.)
Hammarström, M. Autonomic nervous control of cervical secretion in the guinea-pig, 367
Hammel, H. T. (*see* Mercer, J. B.)
Hansson, T. (*see* von Euler, G.)
Härfstrand, A., Cintra, A., Fuxe, K., Aronsson, M., Wikström, A.-C., Okret, S., Gustafsson, J.-Å. & Agnati, L. F. Regional differences in glucocorticoid receptor immunoreactivity among neuropeptide Y immunoreactive neurons of the rat brain, 3

Hartikainen, J., Ahonen, E., Nevalainen, T., Sikanen, A. & Hakumäki, M. Effect of acute intravenous volume loading on haemodynamics and aortic baroreceptor activity in dogs, 299
Hassinen, I. E. (*see* Leipälä, J. A.)
Hedner, J. (*see* Pettersson, A.), 323, 487
Hedner, T. (*see* Pettersson, A.), 323, 487
Hedqvist, P. (*see* Raud, J.)
Heilbronn, E. (*see* Johansson, S.)
Hellstrand, P. (*see* Vedernikov, Y. P.)
Hellström, S. (*see* Dahlqvist, A.)
Hemlin, M. & Sjövall, H. Evidence for sympathetic regulation of the hydraulic conductance of rat jejunal mucosa *in vivo*, 459
Henriksson, J. (*see* Nie, Z. T.), 513, 523
Henriksson, J. (*see* Zetan, N.)
Hulten, L. (*see* Carlstedt, A.)

Idström, J.-P. (*see* Soussi, B.)
Ilebekk, A. (*see* Ellingsen, Ø.)
Ilebekk, A. (*see* Thorvaldson, J.)
Ilebekk, A. (*see* Vengen, Ø. A.)
Ivarsson, L., Nilsson, N. J. & Lundgren, O. Extravascular arteriovenous oxygen shunting in the cat stomach, 293

Jansen, G., Lundeberg, T., Samuelson, U. E. & Thomas, M. Increased survival of ischaemic musculocutaneous flaps in rats after acupuncture, 555
Jansson, A., Fuxe, K., Eneroth, P. & Agnati, L. F. Centrally administered galanin reduces dopamine utilization in the median eminence and increases dopamine utilization in the medial neostriatium of the male rat, 199
Jivegård, L. (*see* Thune, A.)
Jóhannsson, M. & Asgrimsson, H. Short-term effects of stimulus interval changes in guinea-pig and rat atrial muscle, 73
Johansson, I. G. M., Grundström, N. & Andersson, R. G. G. Both the cholinergic and non-cholinergic components of airway excitation are inhibited by morphine in the guinea-pig, 411
Johansson, S., Rydqvist, B., Swerup, C., Heilbronn, E. & Århem, P. Action potentials of cultured human oat cells: whole-cell measurements with the patch-clamp technique, 573
Johnsson, E. (*see* Volkmann, R.)
Jonson, C. (*see* Fandriks, L.)

Karlberg, B. E. (*see* Olsson, K.)
Karlén, J. Renal response to low and high phosphate intake in weanling, adolescent and adult rats, 317
Karlson, E. (*see* Nie, Z. T.), 513
Karlsson, S. & Ahrén, B. Effects of three different cholecystokinin receptor antagonists on basal and stimulated insulin and glucagon secretion in mice, 271

KARWATOWSKA-PROKOPCZUK, E. & WENNMALM, Å. L-arginine inhibits noradrenaline release in sympathetically stimulated rabbit hearts, 419
KEHR, A. (*see* CARLSON, S.)
KELBÆK, H. (*see* VOLLMER-LARSEN, A.)
KIHLSTRÖM, M., OJALA, J. & SALMINEN, A. Decreased level of cardiac antioxidants in endurance-trained rats, 549
KIIL, F. (*see* THORVALDSON, J.)

LACROIX, J. S. (*see* MATRAN, R.), 29, 335
LACROIX, J. S., STJÄRNE, P., ÄNGGÅRD, A. & LUNDBERG, J. M. Sympathetic vascular control of the pig nasal mucosa (III): co-release of noradrenaline and neuropeptide Y, 17
LÄNNE, T. (*see* LUNDVALL, J.)
LARSSON, O. & FREDHOLM, B. B. Carbachol stimulation of inositol phosphate accumulation in rat submandibular gland fragments is not modified by VIP, 263
LEIPÄLÄ, J. A., VIRTANEN, P., RUSKOAHO, H. J., HASSINEN, I. E. & TAKALA, T. E. S. Transmural distribution of left ventricular glucose uptake in spontaneously hypertensive rats during rest and exercise, 435
LINNANKOSKI, I. (*see* CARLSON, S.)
LISJÖ, S. (*see* NIE, Z. T.), 513, 523
LÖNNERHOLM, G. (*see* CARTER, N.)
LUNDBERG, J. M. (*see* FRANCO-CERECEDA, A.)
LUNDBERG, J. M. (*see* LACROIX, J. S.)
LUNDBERG, J. M. (*see* MATRAN, R.), 29, 335
LUNDEBERG, T. (*see* JANSEN, G.)
LUNDGREN, O. (*see* BUSTAMANTE, S. A.)
LUNDGREN, O. (*see* IVARSSON, L.)
LUNDVALL, J. & LÄNNE, T. Large transcapillary hydraulic conductance in skeletal muscle and skin of man revealed by a new technique, 417

MÅNSSON, B. (*see* EKSTRÖM, J.), 249, 255
MARTINI, S., BRUBAKK, A. O. & BECH, C. Effect of high pressure on metabolic response to cold in rats, 359
MARTLING, C.-R. (*see* MATRAN, R.), 29, 335
MASPERS, M. (*see* BJÖRNBERG, J.)
MATRAN, R., ALVING, K., MARTLING, C. R., LACROIX, J. S. & LUNDBERG, J. M. Vagally mediated vasodilatation by motor and sensory nerves in the tracheal and bronchial circulation of the pig, 29
MATRAN, R., ALVING, K., MARTLING, C.-R., LACROIX, J. S. & LUNDBERG, J. M. Effects of neuropeptides and capsaicin on tracheobronchial blood flow of the pig, 335
MELLANDER, S. (*see* BJÖRNBERG, J.)
MERCER, J. B. & HAMMEL, H. T. Total calorimetry and temperature regulation in the nine-banded armadillo, 579
MSGHINA, M., STJÄRNE, E. & STJÄRNE, L. Potassium channel blocking agents induce occasional spontaneous action potentials and multiquantal ATP release in sympathetic nerve terminals, 593
MYHRE, K. (*see* NICOLAYSEN, G.)

NEDERGAARD, S., WEBB, C. & GREENFIELD, S. A. A possible ionic basis for dendritic release of dopamine in the guinea-pig substantia nigra, 67
NEVALAINEN, T. (*see* HARTIKAINEN, J.)
NICOLAYSEN, G., ELLINGSEN, I., OWE, J. O. & MYHRE, K. Arterial P_{CO_2} and pH in man during 3 days' exposure to 2.8 kPa CO_2 in the inspired gas, 399
NIE, Z. T., LISJÖ, S., KARLSON, E., GOERTZ, G. & HENRIKSSON, J. *In-vitro* stimulation of the rat epitrochlearis muscle. I. Contractile activity *per se* affects myofibrillar protein degradation and amino acid metabolism, 513
NIE, Z. T., LISJÖ, S., ASTRAND, P.-Ö. & HENRIKSSON, J. *In-vitro* stimulation of the rat epitrochlearis muscle. II. Effects of catecholamines and nutrients on protein degradation and amino acid metabolism, 523
NILSSON, B.-O. (*see* EKSTROM, J.), 249, 255
NILSSON, H. (*see* SJÖBLOM-WIDFELDT, N.)
NILSSON, N. J. (*see* IVARSSON, L.)
NORDBORG, C. The influence of antihypertensive treatment on the mesenteric arterial structure in spontaneously hypertensive rats. A morphometric study, 47
NORDGREN, S. (*see* CARLSTEDT, A.)
NORDIN, M. & HAGBARTH, K.-E. Mechanoreceptive units in the human infra-orbital nerve, 149
NORDIN, M. & THOMANDER, L. Intrafascicular multiunit recordings from the human infra-orbital nerve, 139
NORDLANDER, M. (*see* FRIBERG, P.)

OJALA, J. (*see* KIHLSTRÖM, M.)
OKRET, S. (*see* HARFSTRAND, A.)
OLDFORS, A. (*see* ULLMAN, M.), 531, 537
OLSSON, K., DAHLBORN, K. & KARLBERG, B. E. Temporary lack of ANP response to intravenous saline loads in goat kids, 591
OWE, J. O. (*see* NICOLAYSEN, G.)

PEQUIGNOT, J. M. (*see* DAHLQVIST, A.)
PERTOVAARA, A. (*see* CARLSON, S.)
PETTERSSON A.-S. (*see* VOLKMANN, R.)
PETTERSSON, A., HEDNER, J. & HEDNER, T. Relationship between renal sympathetic activity and diuretic effects of atrial natriuretic peptide (ANP) in the rat, 323
PETTERSSON, A., HEDNER, J. & HEDNER, T. Renal interaction between sympathetic activity and ANP in rats with chronic ischaemic heart failure, 487

RAUD, J., DAHLÉN, S.-E., SMEDEGÅRD, G. & HEDQVIST, P. An intravital microscopic model for mast cell-

dependent inflammation in the hamster cheek pouch, 95
REN, J. M., ROBERG, S. & SAHLIN, K. Oxygen deficit is not affected by the rate of transition from rest to submaximal exercise, 545
ROSENGREN, E. (*see* EKSTROM, J.), 249, 255
ROSLAND, J. H. (*see* EIDE, P. K.)
RUPP, H. (*see* FRIBERG, P.)
RUSKOAHO, H. T. (*see* LEIPÄLÄ, J. A.)
RYDQVIST, B. (*see* JOHANSSON, S.)

SAHLIN, K. (*see* REN, J. M.)
SALMINEN, A. (*see* KIHLSTRÖM, M.)
SAMUELSON, U. E. (*see* JANSEN, G.)
SANENGEN, T., CLEMONS, G. K., HALVORSEN, S. & WIDNESS, J. A. Immunoreactive erythropoietin and erythropoiesis stimulating factor(s) in plasma hypertransfused neonatal and adult mice. Studies with a radioimmunoassay and a cell culture assay for erythropoietin, 11
SARIA, A. (*see* FRANCO-CERECEDA, A.)
SCHERSTEN, T. (*see* SOUSSI, B.)
SEGER, J. (*see* FRIDÉN, J.)
SEJERSTED, O. M. (*see* ELLINGSEN, Ø.)
SIKANEN, A. (*see* HARTIKAINEN, J.)
SJÖBLOM-WIDFELDT, N. & NILSSON, H. Sympathetic transmission in small mesenteric arteries from the rat: highly calcium-dependent at low stimulation rates, 505
SJOVÄLL, H. (*see* HEMLIN, M.)
SKOTTNER, A. (*see* ULLMAN, M.), 537
SMEDEGÅRD, G. (*see* RAUD, J.)
SOLLEVI, A. (*see* EDLUND, A.)
SOUSSI, B., IDSTRÖM, J.-P., SCHERSTEN, T. & BYLUND-FELLENIUS, A.-C. Kinetic parameters of cytochrome c oxidase in rat skeletal muscle: effect of endurance training, 373
STJÄRNE, E. (*see* MSGHINA, M.)
STJÄRNE, E. (*see* STJÄRNE, L.), 217, 227
STJÄRNE, L. (*see* BAO, J. X.)
STJÄRNE, L. (*see* MSGHINA, M.)
STJÄRNE, L. & STJÄRNE, E. Basic features of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP, 217
STJÄRNE, L. & STJÄRNE, E. Some pharmacological applications of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP, 227
STJÄRNE, P. (*see* LACROIX, J. S.)
STOCK, S. & UVNÄS-MOBERG, K. Interaction between gastrin-17 and oxytocin on plasma levels of insulin, glucagon and glucose in conscious dogs, 559
SVANVIK, J. (*see* THUNE, A.)
SVENSSON, T. H., ENGBERG, G., TUNG, C.-S. & GRENHOFF, J. Pacemaker-like firing of noradrenergic locus coeruleus neurons *in vivo* induced by the excitatory amino acid antagonist kynurenate in the rat, 421
SWERUP, C. (*see* JOHANSSON, S.)
SZABÓ, T. (*see* ZALLAR, A.)

TAKALA, T. E. S. (*see* LEIPÄLÄ, J. A.)
TANILA, H. (*see* CARLSON, S.)
THOMANDER, L. (*see* NORDIN, M.), 139
THOMAS, M. (*see* JANSEN, G.)
THORVALDSON, J., ILEBEKK, A., AARS, H. & KIIL, F. Effect of increased α-adrenergic activity on the blood pressure/cardiac output relationship in dogs, 113
THUNE, A., JIVEGÅRD, L. & SVANVIK, J. Flow resistance in the feline choledocho-duodenal sphincter as studied by constant-pressure and constant-perfusion techniques, 279
TOBIN, G. (*see* EKSTROM, J.), 249, 255
TUNG, C.-S. (*see* SVENSSON, T. H.)

ULLMAN, M. & OLDFORS, A. Effects of growth hormone on skeletal muscle. I. Studies on normal adult rats, 531
ULLMAN, M., ALAMEDDINE, H., SKOTTNER, A. & OLDFORS, A. Effects of growth hormone on skeletal muscle. II. Studies on regeneration and denervation in adult rats, 537
UVNÄS, B. *Acta Physiologica Scandinavica – 100 years*, 1
UVNÄS-MOBERG, K. (*see* ALINO, S. F.)
UVNÄS-MOBERG, K. (*see* STOCK, S.)

VEDERNIKOV, Y. P. & HELLSTRAND, P. Effects of reduced oxygen tension on endothelium-dependent relaxation induced by acetylcholine differ in rabbit femoral artery and jugular vein, 343
VENGEN, Ø. A. (*see* ELLINGSEN, Ø.)
VENGEN, Ø. A., ELLINGSEN, Ø. & ILEBEKK, A. Factors reducing left and right ventricular output during simultaneous atrioventricular activation in the pig heart, 477
VIRTANEN, P. (*see* LEIPÄLÄ, J. A.)
VOLKMANN, R., ELY, D., FOLKOW, B., JOHNSSON, E., PETTERSSON, A.-S., WÅHLANDER, H. & FRIBERG, P. Electrophysiological and mechanical characteristics of isolated hearts from spontaneously hypertensive (SHR) and normotensive (WKY) rats on very high- and low-sodium diets, 309
VOLLMER-LARSEN, A., VOLLMER-LARSEN, B., KELBÆK, H. & GODTFREDSEN, J. The veteran athlete: an echocardiographic comparison of veteran cyclists, former cyclists and non-athletic subjects, 393
VOLLMER-LARSEN, B. (*see* VOLLMER-LARSEN, A.)

WAHLANDER, H. (*see* VOLKMANN, R.)
WALLBERG-HENRIKSSON, H. (*see* ZETAN, N.)
WEBB, C. (*see* NEDERGAARD, S.)
WENNMALM, Å. (*see* EDLUND, A.)
WENNMALM, Å. (*see* KARWATOWSKA-PROKOPCZUK, E.)
WIDNESS, J. A. (*see* SANENGEN, T.)
WIKSTROM, A.-C. (*see* HARFSTRAND, A.)

WISTRAND, P. J. (*see* CARTER, N.)

YAJEYA, J., CRIADO GUTIERREZ, J. & FERNANDEZ DE MOLINA, A. Unitary activity in the bed nucleus of the stria terminalis after homo- and contralateral stria terminalis stimulation, 241

ZALLÁR, A. & SZABÓ, T. Historical Note: *Habent sua fata libelli*: the adventurous story of Albert Szent-Gyorgi's book entitled *Studies on Muscle* (1945), 423

ZETAN, N., WALLBERG-HENRIKSSON, H. & HENRIKSSON, J. The rat epitrochlearis muscle: metabolic characteristics, 197

ZINI, I. (*see* FUXE, K.)

ZOLI, M. (*see* FUXE, K.)

ZOLI, M., AGNATI, L. F., FUXE, K. & BJELKE, B. Demonstration of NPY transmitter receptor mismatches in the central nervous system of the male rat, 201

Subject index

Acetylcholine, 67, 343
Action potential, 73, 573
Acupuncture, 555
Adenosine, 39
Adenosine triphosphate (ATP), 217
Adenosine-5′-triphosphate, 17
Adrenal gland, 285
Adrenergic α-receptors, 459
Adrenergic stimulation, 493
α_1-Adrenoceptor, 65
Adrenoceptors, 17
Airway, 411
Allergic inflammation, 95
Amino acid, 513, 523
Amphetamine, 67
Anaemia, 11
Anserine, 549
Anterior uvea, 349
Antihistamine, 95
Antihypertensive treatment, 47
Anus, 57
Arachidonic acid metabolities, 349
Armadillo, 579
Arterial hypotension, 293
Arteries, 505
Arteriolar resistance, 83
Atrial natriuretic peptide (ANP), 323, 487, 591
Atrial pacing, 113
Atrium, 73
Autonomic nerves, 285, 367
AV contraction delay, 477
AV valve regurgitation, 477

Baroreceptor reflexes, 113
Bed nucleus of the stria terminalis, 241
Bicarbonate secretion, 163
Bile, 163
Blood flow, 293
Blood lactate, 545
Blood pressure, 299
Body temperature, 359, 579
Bombesin, 565
Bradykinin, 173, 335
Brain, 3
Branched-chain amino acids, 423
Burst firing, 421

C fibres, 139
CCK-8, 565
CR 1409, 271
Calcitonin, 133
Calcitonin gene-related peptide (CGRP), 133, 173, 335
Calcium, 73, 227, 505
Calcium conductance, 67
Capillary filtration coefficient (CFC), 417
Capillary fluid exchange, 417
Capillary pressure, 83
Capsaicin, 29, 335
Carbachol, 107
Carbonic anhydrase, 163
Cardiac design and salt, 309
Cardiac failure, 487
Cardiac function, 123, 309
Cardiac glycosides, 493
Cardiac output, 299
Cardiac oxygen extraction, 39
Cardiac sensory nerves, 173
Carnosine, 549
Catalase, 549
Catecholamines, 189, 493, 523
Cell migration, 469
Central nervous system, 203
Cervical secretion, 367
Cervix uteri, 367
Channels, 227
Chemical networks, 203
Chemoreceptors, 399
Cholecystokinin (CCK), 271, 279
Cholecystokinin antagonists, 271
Cholera, 469
Cholinergic, 367
Co-transmission, 65
Cold exposure, 579
Compound 48/80, 95
Conditioning effect, 169
Contractile activity, 513
Contraction, 523
Coronary flow, 39
Cyclic AMP, 263

D1 dopamine receptors, 449
Dasypus novemcinctus, 579
Dendritic release, 67
Denervation, 537
Desensitization, 107
Diuresis, 487
Dogs, 299
Dopamine, 67, 199, 323, 449
Dopamine receptors, 443
Duodenum, 285

EDRF, 343
Early anaemia, 11
Echocardiography, 393
Electrical field stimulation, 65

Electrical stimulation, 513, 523
Endothelium, 343
Enteric nervous system, 469
Environmental factors, 169
Enzyme activity, 373
Enzyme biochemistry, 381
Epitrochlearis, 513, 523
Erythropoiesis, 11
Excitatory amino acids, 421
Excitatory junction current, 227, 593
Exercise, 373, 381, 435, 545
Exercise vasodilatation, 83
Extracellular recording, 217

Face, 139, 149
Facial muscles, 139, 149
Facial nerve, 139
Feeding, 559
Femoral artery, 343
Fibre types, 381
Flap survival, 555
Former athletes, 393
Frog, 169

GABA, 67
Galanin, 199
Gastric motility, 285
Gastrin, 559, 565
Gastrointestinal motility, 57
Glucagon secretion, 271
Glucocorticoid receptor, 3
Glutathione peroxidases, 549
Glutathione reductase, 549
Glycogen distribution, 381
Glycolytic enzymes, 197
Goat, 591
Goldblatt hypertension, 123
Growth, 1, 531
Growth hormone, 531, 537
Guanethidine, 189
Guinea-pig, 41, 73, 217

Haematopoietic growth factors, 11
Heart and salt intake, 309
Heart rate, 299
Heliox atmosphere, 359
Hexamethonium, 469
Hierarchical organization, 203
High pressure, 359
Histamine, 335
Horizontal elaboration, 203
Humans, 39, 381
Hydraulic conductance, 459
Hypertension, 435
Hypothalamus, 449
Hypoxia, 343

Immunocytochemistry, 3, 201
In vitro, 523
In vivo, 133, 271
Indomethacin, 349
Inositol phosphates, 263
Insulin release, 107
Insulin secretion, 271
Insulin-like growth factor-I, 537
Insulin-like growth factors, 531
Internal anal sphincter, 57
Intestinal secretion, 459
Intraluminal secretion, 565
Ischaemia, 173
Ischaemic musculocutaneous flaps, 555
Islet of Langerhans, 271
Isoprenaline, 249, 493
Isozymes, 163

Jugular vein, 343

Katacalcin, 133
Kidney, 323, 487
Kynurenate, 421

L-364,718, 271
L-arginine, 419
Lactation, 559
Laryngeal nerves, 189
Laser Doppler flowmetry, 17
Left ventricular end-diastolic pressure, 113
Left ventricular hypertrophy, 123
Leg exercise, 39
Lesions, 427
Leucocyte–endothelium interaction, 95
Lipid peroxides, 549
Liver, 163
Locus coeruleus, 421
Lungs, 399

Man, 417
Manometry, 279
Mast cell degranulation, 95
Mechanical restitution, 73
Mechanoreceptors, 149
Median eminence, 199
Membrane, 443
Mesenteric arteries, 47
Metabolic control, 83
α, β-Methylene-ATP, 65
Microcirculation, 83, 95, 417
Microneurography, 139, 149
Miniaturization, 203
Mismatch, 201
Mitochondrial enzymes, 197
Monkeys, 405
Morphine, 411
Morphometry, 47
Motility, 279
Mouse, 133, 217, 271, 427

Muscarinic receptor, 263
Muscle fibre types, 531
Myocardial glucose uptake, 435
Myocardial potassium balance, 493
Myocardium, 549
Myogenic tone, 83
Myosin isoenzymes, 123

Na currents, 573
Na,K-ATPase, 493
Na–K pump rate, 493
Natriuresis, 487
Neostriatum, 199
Nerve terminal action potential, 593
Nerve terminal spike, 227
Neural transmission, 505
Neuronal inhibition, 411
Neuropeptide Y, 3, 17, 173, 201
Neurotensin, 443
Neurotransmission, 419
Newborn, 591
Nicotine, 67, 173
Nigrostriatal neurons, 67
Nociception, 427
Noradrenaline, 17, 323, 419, 421, 505

Oat cells, 573
Ornithine decarboxylase, 255
Ouabain, 173, 493
[^{3}H]Ouabain binding sites, 493
Oxygen consumption, 359
Oxygen debt, 545
Oxygen transport, 293
Oxytocin, 559

P_2-purinoceptor, 65
Pancreatic hormones, 559
Paraganglia, 189
Parasympathetic nerve, 255
Parasympathetic non-cholinergic vasodilatation, 29
Patch clamp, 573
Peptide histidine isoleucine (PHI), 335
Peripheral resistance, 13
Phenylephrine, 113
Phorbol ester, 107
Pig nasal mucosa, 17
Plasma extravasation, 349
Plasma renin activity, 123, 591
Polyamine metabolism, 249
Polyamines, 255
Post-ES potentiation, 73
Post-exercise, 83
Postnatal period, 11
Potassium, 227
Pre-junctional receptors, 227
Pressoreceptors, 299
Proglumide, 271
Proprioception, 139, 149
Prostacyclin, 39
Prostaglandin synthesis, 39
Protein degradation, 513, 523

Reserpine, 17
Rabbit hearts, 419
Rat 3, 73, 201, 443, 505, 537
Receptors, 201
Rectum, 57
Regeneration, 169, 537
Regularity, 421
Renal nerve denervation, 323
Respiration, 399
Respiratory regulation, 399
Right atrial pressure, 113
Right ventricular afterload, 477

Salivary gland(s), 249, 255, 263
Salt and cardiac function, 309
Salt and hypertension, 309
Sciatic nerve, 169
Sensory nerves, 29
Serotonin, 427
Skeletal muscle, 373, 417, 513, 523, 531, 537
Skin, 139, 149, 417
Small artery resistance, 83
Small cell carcinoma of the lung (SCCL), 573
Small intestine, 469
Sodium, 227
Somatostatin, 565
Sphincter of Oddi, 279
Splanchnic nerves, 285
Spontaneous, 593
Spontaneously hypertensive rats, 47, 435
Steroids, 3
Stimulation frequency, 73
Stomach, 285, 293
Stretch receptors, 149
Stria terminalis, 241
Striatum, 443
Stroke volume, 477
Superoxide dismutases, 549
Sympathectomy, 189
Sympathetic, 65, 217
Sympathetic activity, 487
Sympathetic decentralization, 349
Sympathetic nerve, 255
Sympathetic nervous system, 139, 505
Syndromic response, 203

Tactile discrimination, 405
Tactile sensibility, 139, 149
Tail skin temperature, 427
Tail-flick reflex, 427
Temperature regulation, 359, 579
Theophylline, 39
Thermal conductance, 359
Thermosensitivity, 579

Thioredoxin reductase, 549
Thoracic aorta, 299
Thyroid hormone secretion, 133
Thyroid stimulating hormone (TSH), 133, 449
Toluene, 443
Total calorimetry, 579
Tracheal and bronchial circulation, 29, 335
Transmural distribution, 435
Transmural nerve stimulation, 505
Trigeminal nerve, 139, 149

Ultrastructure, 381
Unitary activity, 241

Vagal nerves, 285
Vagus nerve, 29
Vas deferens, 217, 593
Vascular control, 17
Vascular permeability, 349
Vascular tone, 349
Vasoactive intestinal polypeptide (VIP), 263, 335, 367
Vasoconstriction, 65
Vasodilation, 299
Venous resistance, 83
Ventilation, 399
Ventricular filling, 477
Vertical elaboration, 203
Veteran athletes, 393
Visual deprivation, 405
Vitamin E, 549
Volume transmission, 203

Whole-cell mode, 573
Wiring transmission, 203